BEFORE THE

Federal Communications Commission

WASHINGTON, D. C. 20554

In the Matter of Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them and Examination of Exclusivity and Frequency Assignment Policies of the Private Land Mobile Radio Services	)	PR Docket No. 92-235

TO: The Commission

COMMENTS OF MANUFACTURERS RADIO FREQUENCY ADVISORY COMMITTEE, INC.

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SUMMARY

Manufacturers Radio Frequency Advisory Committee, Inc. ("MRFAC") supports user exclusivity as a positive incentive to narrowband conversion. MRFAC would urge, however, that users in less populated areas not be required to convert in order to secure the benefits of exclusivity; such licensees should be able to justify exclusivity based on other factors as well, e.g. special safety or operational requirements.

In other respects, MRFAC urges that adequate spectrum be preserved for shared use and that resale not be permitted. Thousands of manufacturers rely on shared use frequencies for highly specialized applications; they should not be required to shift to exclusivity if their needs do not require it. Likewise, the Commission should opt for non-profit cost-sharing in lieu of resale (the latter could undermine the internal-use purpose of the allocation).

Finally, auctions and user fees should not be adopted: adequate incentives exist for narrowband conversion and auctions would deprive existing licensees of the flexibility needed to modify and expand their systems (to name just one problem with such proposals).

Channels created by the investment of existing licensees should be preserved for the benefit of such licensees. Any other approach would be inequitable, if not unlawful.

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COMMENTS OF MANUFACTURERS RADIO FREQUENCY ADVISORY COMMITTEE, INC.

Manufacturers Radio Frequency Advisory Committee, Inc. ("MRFAC"), by its counsel, hereby submits its comments on the Further Notice of Proposed Rulemaking ("Further Notice") in the above-captioned proceeding (FCC 95-255, released June 23, 1995).

As the Commission's records reflect, MRFAC is the Commission-certified entity for coordination of frequencies in the Manufacturers Radio Service, and a representative trade association of the nation's manufacturers. MRFAC's membership comprises a cross-section of the nation's manufacturing industry. Member firms range from large national and multi-national corporations to much smaller companies. These firms are found in all parts of the country, in both urban and rural areas, and while some member firms manufacture primarily one product, others have diversified operations.

INTRODUCTION

Manufacturing is vital to the economy and well-being of the United States. Since the end of World War II, manufacturing has constituted between 20-23% of the Gross Domestic Product ("GDP"). However, this large and stable share of GDP tells only half the story -- that which manufacturing adds to the economy as a result of final sales. Manufacturing's total contribution to the United States economy is much higher through the many goods produced at the intermediate level for use in producing other goods and services. When intermediate production is accounted for, manufacturing constitutes nearly one-third (31%) of total U.S. economic activity.

Manufacturing's effect on the economy is felt in a myriad of ways. First, manufacturing acts as a multiplier, stimulating activity in other sectors. A change in manufacturing output of $1 results in a total increase in output throughout the economy of $2.30. Manufacturing's stimulus to total activity is greater than that of all other broadly-defined sectors of the economy.

Second, manufacturing creates jobs. For each $1 billion of new exports, an average of 17,000 new jobs are created. Indeed, from 1986 through 1992, the number of jobs related to exported goods increased by more than 2.3 million, to a total of 7.3 million in 1992. Moreover, in 1994, the U.S. work force included 18.3 million direct manufacturing employees.

Third, due to the recent manufacturing export boom, manufacturing positively influences the nation's balance of trade. Between 1987-1994 manufactured exports grew at a rate of 9.3% annually, twice the rate of import growth. Moreover, from 1985-1993 U.S. exports grew significantly faster than those of its two primary competitors, Japan and Germany (U.S. exports grew at an average of 8.6% per year; Japan's at 2.3% and Germany's at 1.8%). Because American manufacturing has increased its trade competitiveness, the American share of world merchandise exports has increased since its 1986 low.

In addition to manufacturing's direct impact on the economy, the sector contributes an array of other benefits to the nation. The growth of manufacturing productivity sustains the U.S. standard of living. Manufacturing productivity has grown at an average of 3% per year in the past decade, more than three times the productivity growth of the non-farm business sector. In addition, manufacturers perform most of the nation's critical research and development -- 75% of industrial R & D in 1994 (industrial R & D constituting 72% of total R & D).

Radio communications and, more specifically, private radio, is vital to the continued success of U.S. manufacturers. Private radio enhances productivity, and plays an important role in worker safety. It is central to the improved global competitiveness of the industry.

The frequencies allocated for the Manufacturers Radio Service ("MRS") (a total of 44 frequencies at high-band VHF and 33 pairs at UHF (below 512 MHz)) figure importantly in each of these areas. MRS frequencies are used for inventory control, for emergency medical communications, for plant security, for materials handling, and for production control, to name just a few of the applications.

For example, private radio is utilized as an essential component for just-in-time delivery of components to the assembly line. These techniques have been essential to much of the productivity gains which U.S. manufacturing has made in the last 15 years.

Likewise, much of manufacturing involves processes which entail a risk of injury to workers. One of the ways in which such risks are controlled and minimized is by the use of emergency medical radio systems, of which man-down systems are one type. Employees whose positions entail work in isolated, potentially hazardous environments are often equipped with a transmitter which automatically activates in the event the device senses that the worker has become prone; the signals from such devices are received by emergency personnel who can come to the worker's assistance. Another example of safety-related facilities is the use of radio for plant evacuation purposes. Such facilities can be vital to the safety of hundreds of workers and the surrounding community.

Another frequent application is remote control of materials on or above the factory floor. Large, heavy objects such as beakers of molten steel, aircraft wing assemblies, and castings are moved by overhead cranes remotely controlled by a worker on the factory floor. Radio units are used to control locomotives which move raw materials and finished products between and among buildings at a manufacturing plant. Radio devices are used to monitor tanks containing volatile chemicals.

These are just a few of the many different and highly specialized ways in which manufacturers utilize private mobile radio facilities. Without the ability to own and operate such systems, U.S. manufacturers would be seriously handicapped.

BACKGROUND

In the Further Notice, the Commission seeks comment on three items: exclusivity, auctions and user fees. With respect to exclusivity, the Commission submits for comment a regime it calls "shared exclusivity," which it believes will promote the efficient use of spectrum. Under "shared exclusivity," additional systems would not be licensed on the channels of existing licensees that commit to install narrowband technology within a specified period of time. Co-channel licensees in any given area would be called upon to strike exclusivity agreements, which agreements would be filed with the frequency coordinators. So that a complete agreement may be reached among all co-channel licensees, the frequency coordinators would be allowed to suspend for 90 days further coordinations on the particular frequency.

The Commission further proposes that licensees entering into these agreements and converting to narrowband technology be empowered to lease excess capacity on their channels. Further Notice at para. 129.

The Commission also seeks comments as to the implementation of auctions or user fees in the private land mobile bands, if authorized by Congress. For auctions it proposes the 900 MHz SMR and MDS model of auctioning geographic overlay licenses.

For user fees the Commission proposes a scheme by which those licensees who utilize greater amounts of spectrum would pay more than those who use less. Factors to be considered would include bandwidth, the population covered, and the area of operation. The amount of spectrum use fees would be based on the price of "similarly situated spectrum bands" such as IVDS and narrowband PCS. Id. at para. 138.

Insofar as newly-created channels are concerned, the Further Notice contemplates the possibility of auctions, distributing the channels among the consolidated radio services, or assigning them to public safety licensees.

DISCUSSION

"Shared Exclusivity"

MRFAC favors exclusivity. True exclusivity would offer many benefits to large users, as demonstrated by the success of exclusive licensing above and at 470-512 MHz for example. While the Commission has not offered a regime of true exclusivity (as demonstrated by the oxymoron "shared exclusivity"), nonetheless MRFAC sees benefits in an exclusivity program if properly structured.

Except possibly for frequency-congested metropolitan areas, exclusivity should not be based on a mandatory conversion to narrowband equipment; after all, in most areas of the country there is no frequency congestion problem. Users in these areas should be allowed to secure exclusivity based upon any one or more of several factors -- narrowband conversion being only one. Such factors could include special operational or safety requirements, proposed use of narrowband equivalent technology, or attainment of certain loading levels. Any one of these (plus, of course, agreement of co-channel licensees) should suffice for a grant of exclusivity in non-congested areas.

By contrast, the regulations contained in the <u>Further Notice</u> would require licensees desiring exclusivity in non-congested areas to replace equipment needlessly. Such a result would be particularly unfortunate in the areas of the country where licensees do not face channel congestion. The costs of equipment replacement would be passed through to consumers in the form of higher prices -- an uneconomic result. The limited beneficiaries of such a requirement would be the sellers of narrowband equipment.[1/]

[1/] MRFAC would not oppose new licensees being required to use narrowband equipment in order to obtain exclusivity. Such entities have not yet invested in existing technology.

The Commission has repeatedly stressed its support for market-based forces. A framework governed by market forces would permit licensees to enter into exclusivity agreements as necessitated by their individual circumstances, without forcing licensees to make capital investments they may never need nor want.

Marketplace incentives will draw some licensees to narrowband equipment, thereby achieving the agency's stated goal of freeing up new channels. Narrowband conversion offers benefits to users, including a "clear" channel with improved communications quality and greater features such as signal security. Therefore, many exclusivity agreements will include narrowband conversion anyway, irrespective of whether the Commission so requires. Accordingly, the agency should allow market forces to work freely at least in the non-congested areas.

As to the congested areas MRFAC would not oppose a requirement that exclusivity be conditioned on narrowband (or equivalent) conversion. Relief for the major urban areas has been a principal rationale for re-farming. The <u>Further Notice</u>'s proposal is thus entirely consistent with this goal.

The 90-day period contemplated by the <u>Further Notice</u> for negotiating co-channel agreements is insufficient. In a major metropolitan area, exclusivity agreements might be required with dozens of other users. To allow for these negotiations, six months should be given incumbent licensees before accepting applications for new facilities on their channels.

Notwithstanding its endorsement of the principle of exclusivity, it is essential that the Commission preserve the shared use option. Shared channels are perfectly adequate for many manufacturers. Frequency coordinators should be asked to submit to the Commission suggestions as to how much spectrum need be reserved for shared use. Accordingly, MRFAC urges the Commission to take further comment on this specific issue before finalizing its decision.

In all events, the internal communications needs of manufacturers are not to be satisfied by other technologies such as SMRs and cellular, as suggested in the Further Notice. Id. at para. 128. Commercial carriers offer lowest common denominator-type services. Private radio needs, in contrast, are highly specialized. The commercial carriers' generic approach simply does not meet those needs. The dramatic increase in private land mobile radio use in the last 15 years is evidence of the very strong demand for internal communications systems. In addition, commercial carriers would require private licensees to sacrifice operational control and reliability for increased cost. Other technologies are plainly not an acceptable substitute.

Excess capacity resale, as proposed in the Further Notice, is inappropriate for these bands. These bands are dedicated to the internal communications needs of licensees. If resale is allowed, it will transform the character of the allocation; an essential economic tool would be lost, with profound effects on the economy.

Nor is resale necessary. Licensees desiring to implement trunking, for example, could establish non-profit, cost-sharing arrangements; there need not be resale in order to realize such benefits. In short, resale has no place in these bands; the Commission should discard the idea.

Auctions

Auctions should not be adopted for private radio. Private land mobile radio users do not use the spectrum to generate revenue from paying subscribers. To the contrary, they utilize the spectrum for internal communications, supporting the licensee's fundamental purpose of production or delivery of goods or services. It is unrealistic to expect private radio licensees to be able to bid effectively against those users who generate revenue directly from their spectrum, *i.e.* carriers.

Equities aside, the private radio spectrum below 512 MHz is inappropriate for auctions. First, there is the question of what spectrum exists to auction. There are no significant blocks available in this heavily encumbered portion of the spectrum. Thus, the Commission would have to auction private land mobile radio spectrum piecemeal. Such an approach would not allow the Commission to determine the number, the coverage or even the sequence of channels to be auctioned. It further denies licensees the ability to acquire the same frequency in multiple areas, affecting those users requiring an extended area system. Second, overlay license auctions, as mentioned in the Further Notice (para. 142), would prevent existing licensees from expanding or modifying their coverage or usage. In sum, the administrative costs imposed on the Government in this scheme, as well as the profound negative impact on existing licensees, vitiate any conceivable "efficiency benefits". Third, much of the spectrum is and hopefully will remain for shared use; this too is contrary to auction principles which require exclusive use channels only.

User Fees

The Commission does not currently possess the authority to impose user fees, as it has proposed. Unlike auctions, the agency is not likely to obtain this authority soon, as the pending budget reconciliation language does not contemplate user fees. However, since the issue was raised in the Further Notice, MRFAC submits the following comments.

Existing licensees should not be subject to user fees. These users currently pay regulatory fees, and there is no basis for imposing an additional burden which amounts to a tax on PMRS licensees.

Moreover, it would be difficult to establish a value for private land mobile spectrum. The Commission's notion that a "value" could be determined from auction prices for IVDS and PCS spectrum is erroneous. The value of spectrum, which does not independently generate revenue and is utilized internally to support a non-communications business, cannot be determined by the prices paid at auction for commercial spectrum.

MRFAC recognizes that the current view disfavors the allocation of additional spectrum without payment in some form. Accordingly, MRFAC and other private land mobile users have expressed a willingness to pay for new spectrum as the quid pro quo for an addition allocation. There is no such cost-benefit trade-off in the case of imposing fees on existing frequency users -- especially when a mandate from Washington will already be blamed for forcing many such users to in effect purchase new equipment.

Newly-Created Channels

The logical disposition of the channels to be created by the conversion to narrowband equipment is to allow them to remain with the licensees making the capital investment in narrowband equipment. Failure to allow the licensee creating the new channel to retain it would be inequitable.

Moreover, the Further Notice fails to recognize that retention offers a powerful, market-based incentive to convert to narrowband technology. A current user should have the right to a new channel it creates through its investment in expensive new technology. By not allowing this the Further Notice would create what amounts to a disincentive to the entire narrowband conversion program, i.e. by denying the user who makes the narrowband conversion the right to the new channel, the Commission places such the user at a relative disadvantage to the user who maintains its 25 kHz system.

CONCLUSION

For the foregoing reasons, MRFAC urges the Commission to adopt an exclusivity program without a requirement for narrowband conversion, not to adopt resale of excess capacity, and not to consider auctions or user fees.

Respectfully submitted,

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